

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> ( Not for submission under 37 CFR 1.99)	Application Number		10632340
	Filing Date		2003-08-01
	First Named Inventor	Cornelia J. Forster	
	Art Unit	1624	
	Examiner Name	Venkataraman Balasubramanian	
	Attorney Docket Number	VPI/02-119 US	

U.S.PATENTS							Remove
Examiner Initial*	Cite No	Patent Number	Kind Code <sup>1</sup>	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	
	1	5124441		2008-06-23	Pharmacia Aktiebolag		
	2	6727251		2004-04-27	Vertex Pharmaceuticals Incorporated		
If you wish to add additional U.S. Patent citation information please click the Add button.							Add
U.S.PATENT APPLICATION PUBLICATIONS							Remove
Examiner Initial*	Cite No	Publication Number	Kind Code <sup>1</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	
	1	20030207873		2003-11-06	Harrington et al.		
	2	20030144309		2003-07-31	Choon-Moon		
	3	20040009996		2004-15-01	Moon et al.		
	4	20030171389		2003-09-11	Bemis et al.		

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	10632340
Filing Date	2003-08-01
First Named Inventor	Cornelia J. Forster
Art Unit	1624
Examiner Name	Venkataraman Balasubramanian
Attorney Docket Number	VPI/02-119 US

5	20040029857		2004-02-12	Hale et al.	
6	20050234059		2005-10-20	Hale et al.	
7	20040097531		2004-05-20	Ledeboer et al.	
8	20030096813		2003-05-22	Cao et al.	
9	20030004161		2003-01-02	Vertex Pharmaceuticals Incorporated	

If you wish to add additional U.S. Published Application citation information please click the Add button. [Add](#)

**FOREIGN PATENT DOCUMENTS**

[Remove](#)

Examiner Initial*	Cite No	Foreign Document Number <sup>3</sup>	Country Code <sup>2</sup> ;	Kind Code <sup>4</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T <sup>5</sup>
	1							<input type="checkbox"/>

If you wish to add additional Foreign Patent Document citation information please click the Add button. [Add](#)

**NON-PATENT LITERATURE DOCUMENTS**

[Remove](#)

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>5</sup>
	1	Charpiot, B. et al., "Quinazolines: Combined type 3 and 4 phosphodiesterase inhibitors", Bioorg. Med. Chem. Lett., 8 (20), 2891-2896 (1998).	<input type="checkbox"/>

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	10632340
Filing Date	2003-08-01
First Named Inventor	Cornelia J. Forster
Art Unit	1624
Examiner Name	Venkataraman Balasubramanian
Attorney Docket Number	VPI/02-119 US

2	Shikhaliev, K.S. et al., "Heterocyclization of quinazol-2-ylguanidines. 1. Reaction with amino acids", Chem. Heterocycl. Compd., 35 (7), 818-820 (1999).	<input type="checkbox"/>
3	Singh, S.P. et al., "Synthesis & Mass Spectra of Some Substituted 2-(2'-Benzazolylamino)pyrimidines", Indian J. Chem. Sect. B, 22(1); 37-42 (1983).	<input type="checkbox"/>
4	Ti, J. et al., "Anticandidal activity of pyrimidine-peptide conjugates", J. Med. Chem., 23(8), 913 – 918 (1980).	<input type="checkbox"/>
5	Kretzschmar, E. et al., "Synthese von 2,6-disubstituierten 4-Hydroxy-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidinen", Pharmazie, 43(7), 475-476 (1988).	<input type="checkbox"/>
6	Norman, M.H. et al., "Structure-Activity Relationships of a Series of Pyrrolo[3,2-d]pyrimidine Derivatives and Related Compounds as Neuropeptide Y5 Receptor Antagonists", J. Med. Chem., 43(22), 4288 -4312 (2000).	<input type="checkbox"/>
7	Nugent, R.A. et al., "Pyrimidine Thioethers: A Novel Class of HIV-1 Reverse Transcriptase Inhibitors with Activity Against BHAP-Resistant HIV", J. Med. Chem., 41, 3793-3803 (1998).	<input type="checkbox"/>
8	Myers, M.R. et al., "The synthesis and SAR of new 4-(N-alkyl-N-phenyl)amino-6,7-dimethoxyquinazolines and 4-(N-alkyl-N-phenyl)aminopyrazolo[3,4-d]pyrimidines, inhibitors of CSF-1R tyrosine kinase activity", Bioorg. Med. Chem. Lett., 7, 4, 421-424 (1997).	<input type="checkbox"/>
9	Agarwal, N. et al., "Suitably functionalised pyrimidines as potential antimycotic agents", Bioorg. Med. Chem. Lett., 10, 8, 703-706 (2000).	<input type="checkbox"/>
10	Crespo, M.I. et al., "Design, Synthesis, and Biological Activities of New Thieno[3,2-d]pyrimidines as Selective Type 4 Phosphodiesterase Inhibitors", J. Med. Chem., 41 (21), 4021 -4035 (1998).	<input type="checkbox"/>
11	Noell, C.W. et al., "Potential Purine Antagonists. XX. The Preparation and Reactions of Some Methylthiopurines", J. Am. Chem. Soc., 81(22), 5997 – 6007 (1959).	<input type="checkbox"/>
12	Lubbers, T. et al., "Design, synthesis, and structure–activity relationship studies of ATP analogues as DNA gyrase inhibitors", Bioorg. Med. Chem. Lett., 10, 8, 821-826 (2000).	<input type="checkbox"/>

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	10632340
Filing Date	2003-08-01
First Named Inventor	Cornelia J. Forster
Art Unit	1624
Examiner Name	Venkataraman Balasubramanian
Attorney Docket Number	VPI/02-119 US

13	D'Atri, G. et al., "Novel pyrimidine and 1,3,5-triazine hypolipemic agents", J. Med. Chem. 27(12), 1621 – 1629 (1984).	<input type="checkbox"/>
14	Venugopalan, B. et al., "Synthesis and antimalarial activity of pyrido[3,2-f]quinoxalines and their oxides", Indian J. Chem. Sect. B, 34, 9, 778-790 (1995).	<input type="checkbox"/>
15	Curd, F.H.S. et al, "Synthetic antimalarials. Part XVII. Some aminoalkylaminoquinoline derivatives", J. Chem. Soc., 899 – 909 (1947).	<input type="checkbox"/>
16	Haworth, R.D. et al., "Synthetic antimalarials. Part XXVII. Some derivatives of phthalazine, quinoxaline, and isoquinoline", J. Chem. Soc., 777 – 782 (1948).	<input type="checkbox"/>
17	Nair, M.D., et al., "3-Chloroisocarbostyryl & Its Chlorination Products", Indian J. Chem., 467-470 (1967).	<input type="checkbox"/>
18	Jeffery, J.E. et al., "Synthesis of sibutramine, a novel cyclobutylalkylamine useful in the treatment of obesity, and its major human metabolites", J. Chem. Soc., Perkin Trans. 1, 21, 2583-2589 (1996).	<input type="checkbox"/>
19	Gnecco, D. et al., "An Improved Preparation of 1-Methyl-4-Cyano-4-phenylpiperidine", Org. Prep. Proced. Int., 18 (4), 478-480 (1996).	<input type="checkbox"/>
20	Fedorynski, M. et al., "Synthesis of 1-Arycyclopropanecarbonitriles under Phase-transfer Catalytic Conditions", Org. Prep. Proced. Int., 27(3), 355-359 (1995).	<input type="checkbox"/>
21	Suzuki, S. et al., "Application of electrogenerated triphenylmethyl anion as a base for alkylation of arylacetic esters and arylacetonitriles and isomerization of allylbenzenes", Can. J. Chem., 72(2): 357–361 (1994).	<input type="checkbox"/>
22	Prasad, G. et al., "18-Crown-6 as a catalyst in the dialkylation of o-nitrophenacyl derivatives", J. Org. Chem., 25, 7188-7190 (1991).	<input type="checkbox"/>
23	Moss, R.A. et al., "Conversion of 'Obstinate' Nitriles to Amidines by Garigipati's Reaction", Tetrahedron Lett., 36(48), 8761-8764 (1995).	<input type="checkbox"/>

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	10632340
Filing Date	2003-08-01
First Named Inventor	Cornelia J. Forster
Art Unit	1624
Examiner Name	Venkataraman Balasubramanian
Attorney Docket Number	VPI/02-119 US

24	Garigipati, R.S., "An efficient conversion of nitriles to amidines", Tetrahedron Lett., 31(14), 1969-1972 (1990).	<input type="checkbox"/>
25	Warner, S.L. et al, "Targeting Aurora-2 Kinase in Cancer," Mol. Cancer Thera., 2, 589-585, 2003.	<input type="checkbox"/>
26	Wagman, A.S. et al, "Discovery and Development of GSK3 Inhibitors for the Treatment of Type 2 Diabetes," Current Pharmaceutical Design, 10, 1105-1137 (2004).	<input type="checkbox"/>
27	Nezu, Y. et al., "Dimethoxypyrimidines as Novel Herbicides. Part 2. Synthesis and Herbicidal Activity of Dimethoxyphenoxyphenoxydimidines and Analogues," Pestic. Sci., 47: 115-124 (1996).	<input type="checkbox"/>
28	Tanaka, T.U. et al., "Evidence that the Ipl1-Sli15 (Aurora Kinase-INCENP) Complex Promotes Chromosome Bi-orientation by Altering Kinetochore-Spindle Pole Connections," Cell, 108, 317-329 (2002).	<input type="checkbox"/>
29	Soriano, P. et al., "Targeted Disruption of the C-SIC PmtO-Oncogene Leads to Osteopetrosis in Mice," Cell, 64: 693-702, (1991).	<input type="checkbox"/>
30	Campbell, S.F. et al., "2,4-Diamino-6,7-dimethoxyquinazolines. 3.2-(4-Heterocyclylpiperazin-1-yl) Derivatives as $\alpha$ 1-Adrenoceptor Antagonists and Antihypertensive Agents," J. Med. Chem., 30, 1794-1798 (1987).	<input type="checkbox"/>
31	Casanova, B. et al., "Revisión crítica de la patogenia actual de la esclerosis múltiple y futuras direcciones posibles," Rev. Neurol., 28 (9): 909-915 (1999).	<input type="checkbox"/>
32	Simone, J.V., "Oncology: Introduction" in Cecil Textbook in Medicine, 20th ed., Vol. 1, 1004-1010 (1996).	<input type="checkbox"/>
33	Coleman, R.A., "The Biological Evaluation of New Compounds" in Medicinal Chemistry: Principles and Practice, King, Frank D. ed, Royal Society of Chemistry, 53-66 (1994).	<input type="checkbox"/>
34	The CONDENSED CHEMICAL DICTIONARY, Sixth Edition by Arthur and Elizabeth Rose, 38 (1961).	<input type="checkbox"/>

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	10632340
Filing Date	2003-08-01
First Named Inventor	Cornelia J. Forster
Art Unit	1624
Examiner Name	Venkataraman Balasubramanian
Attorney Docket Number	VPI/02-119 US

35	Damasio, A.R., "Alzheimer's Disease and Related Dementia," in Cecil Textbook of Medicine, 20th ed., 2: 1992-1996 (1996).	<input type="checkbox"/>
36	Rogers, E. et al., "The aurora kinase AIR-2 functions in the release of chromosome cohesion in Caenorhabditis elegans meiosis," J. Cell Biol., 157(2): 219–229 (2002).	<input type="checkbox"/>
37	Fisher A., "Therapeutic Strategies in Alzheimer's Disease: M1 Muscarinic Agonists," Jpn. J. Pharmacol., 84(2):101-12 (2000).	<input type="checkbox"/>
38	Frame, M.C., "Src in cancer: deregulation and consequences for cell behaviour," Biochimica et Biophysica Acta., 1602, 114– 130 (2002).	<input type="checkbox"/>
39	Frampton, J.E. et al., "Pentoxifylline (Oxpentifylline) - A Review of its Therapeutic Efficacy in the Management of Peripheral Vascular and Cerebrovascular Disorder," Drugs & Aging, 7(6): 480-503 (1995).	<input type="checkbox"/>
40	Ganellin, C.R., "Past Approaches to Discovering New Drugs as Medicines" in Medicinal Chemistry, Principles and Practices. King, Frank D. ed, Royal Society of Chemistry, 189-205 (1994).	<input type="checkbox"/>
41	Hamdane, M. et al., "A Therapeutic Target in Alzheimer Neurodegeneration," J. Mol. Neurosci., 19(3): 275-87 (2002).	<input type="checkbox"/>
42	Hardt, S.E. et al., "Glycogen Synthase Kinase-3 $\beta$ - A Novel Regulator of Cardiac Hypertrophy and Development," Circulation Research, 90: 1055-1063 (2002).	<input type="checkbox"/>
43	Heaney, F. et al., "Pyrimidine annelated heterocycles—synthesis and cycloaddition of the first pyrimido[1,4]diazepine N-oxides," J. Chem. Soc., Perkin Trans. 1, 622–632 (2001).	<input type="checkbox"/>
44	Hendriksen, E.J. et al., "Modulation of muscle insulin resistance by selective inhibition of GSK-3 in Zucker diabetic fatty rats," Am. J. Physiol. Endocrinol. Metab., 284: E892–E900 (2003).	<input type="checkbox"/>
45	Okafor, C.O., "Studies in the Heterocyclic Series. X. 1,3,9-Triazaphenothiazine Ring System, a New Phenothiazine Ring," J. Org. Chem., 40(19): 2753-2755 (1975).	<input type="checkbox"/>

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> ( Not for submission under 37 CFR 1.99)	Application Number		10632340
	Filing Date		2003-08-01
	First Named Inventor	Cornelia J. Forster	
	Art Unit	1624	
	Examiner Name	Venkataraman Balasubramanian	
	Attorney Docket Number	VPI/02-119 US	

46	Jambhekar, S.S., "Biopharmaceutical Properties of Drug Substances" in Principles of Medicinal Chemistry, 4th ed., 12-24, (1995).	<input type="checkbox"/>
47	Layzer, R.B., "Section Five - Degenerative Diseases of the Nervous System" in Cecil Textbook of Medicine, 20th ed., 2: 2050-2057 (1996).	<input type="checkbox"/>
48	Lee, S.J. et al., "Discovery of Potent Cyclic GMP Phosphodiesterase Inhibitors. 2-Pyridyl- and 2-Imidazolylquinazolines Possessing Cyclic GMP Phosphodiesterase and Thromboxane Synthesis Inhibitory Activities," J. Med. Chem., 38 (18): 3547-3557 (1995).	<input type="checkbox"/>
49	Nezu, Y. et al., "Dimethoxypyrimidines as Novel Herbicides. Part 1. Synthesis and Herbicidal Activity of Dimethoxyphenoxyphenoxydimethoxypyrimidines and Analogues," Pestic. Sci., 47: 103-113 (1996).	<input type="checkbox"/>
50	Cohen, P., "Dissection of the Protein Phosphorylation Cascades Involved in Insulin and Growth Factor Action", Biochem. Soc. Trans., 21, 555-567 (1993).	<input type="checkbox"/>

If you wish to add additional non-patent literature document citation information please click the Add button

#### EXAMINER SIGNATURE

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> See Kind Codes of USPTO Patent Documents at [www.USPTO.GOV](http://www.USPTO.GOV) or MPEP 901.04. <sup>2</sup> Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>3</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>4</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>5</sup> Applicant is to place a check mark here if English language translation is attached.